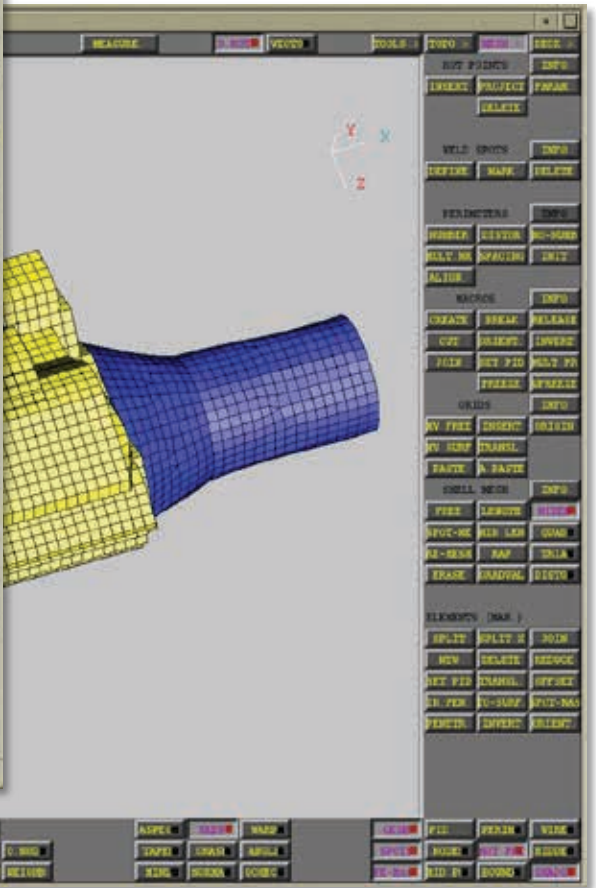
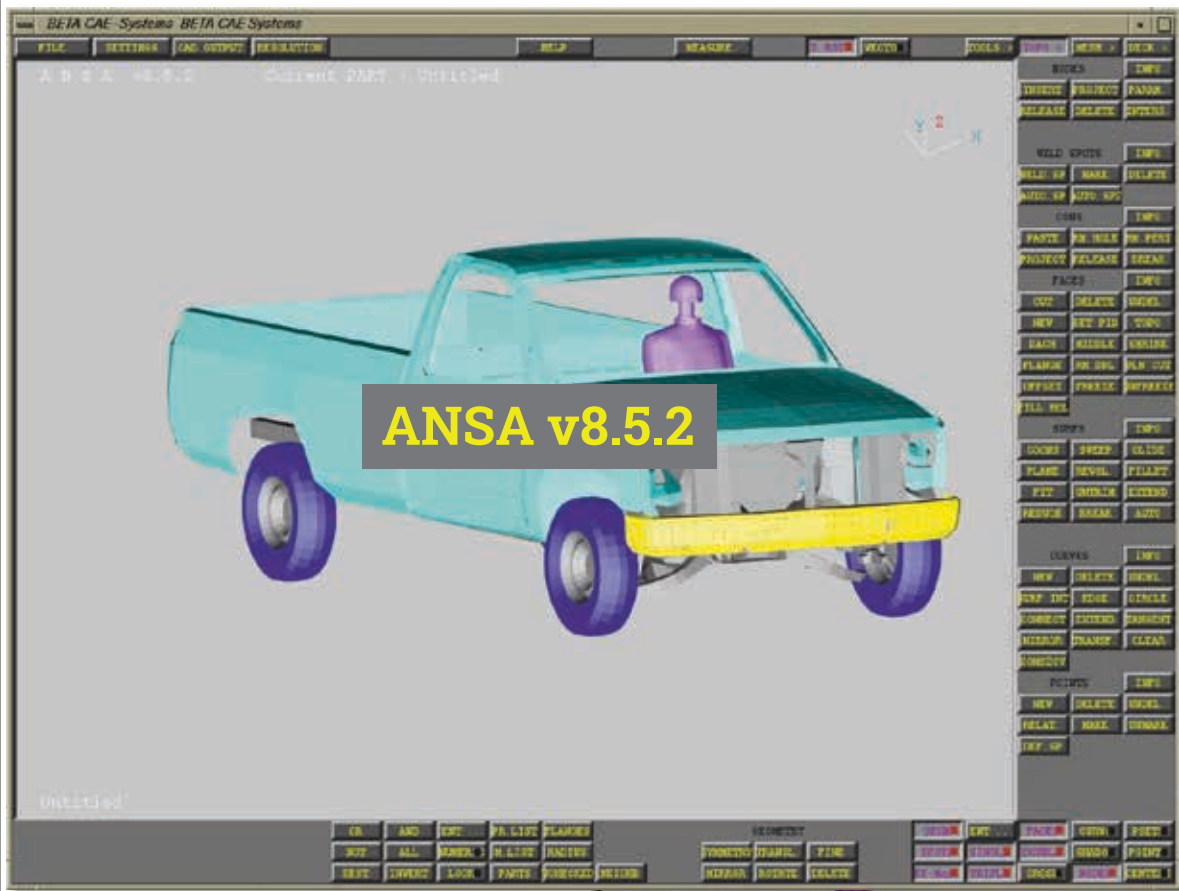


**Groundbreaking
Simulation Solutions**

physics on screen

A new user experience in ANSA

Dr.–Ing. Dimitris Zafeiropoulos



FILE SETTINGS HELP RELEASE BATCH MESH SCRIPT > MORF > TOOLS > TOPO > **ANSA** DECK >

A B S A v12.1.6 64bit (BASTMAN) Current PART : None

ANSA

BETA CAE Systems S.A. (licens) Installation
Version 12.1.6

Untitled

OK	AND	INQI	EXT ...	FR.LIST	EXTEND	JACOB	ASPEM	SKIN	NANP	C.NODE	CODE	EXT ...	ANSA	CURVE	POINT
NOT	ALL	FEEL	RUMERT	N.LIST	ISOLATE	MP.USE	TAPER	CHAM	ANGLE	SMTH	SMTH	GRID	EXT	BOUND	STAR
REST	INVERT	BEIGED	LOCK	PARTS	UNMESH	MP.ALE	LENGTH	SQUISH	COORIN	ANSA	FE.ME	N.PAR	EXT	SHADOK	HIDDEN

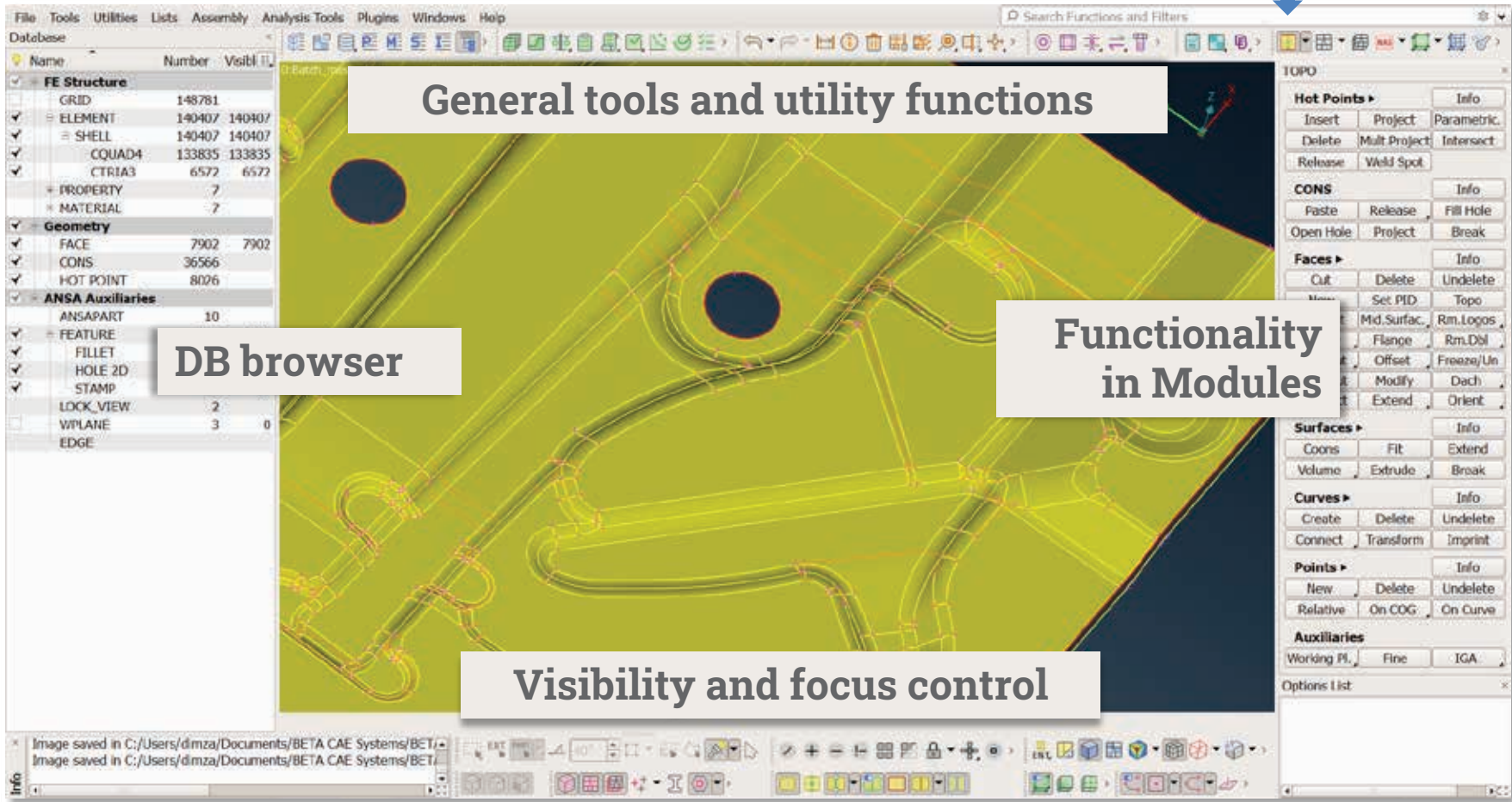
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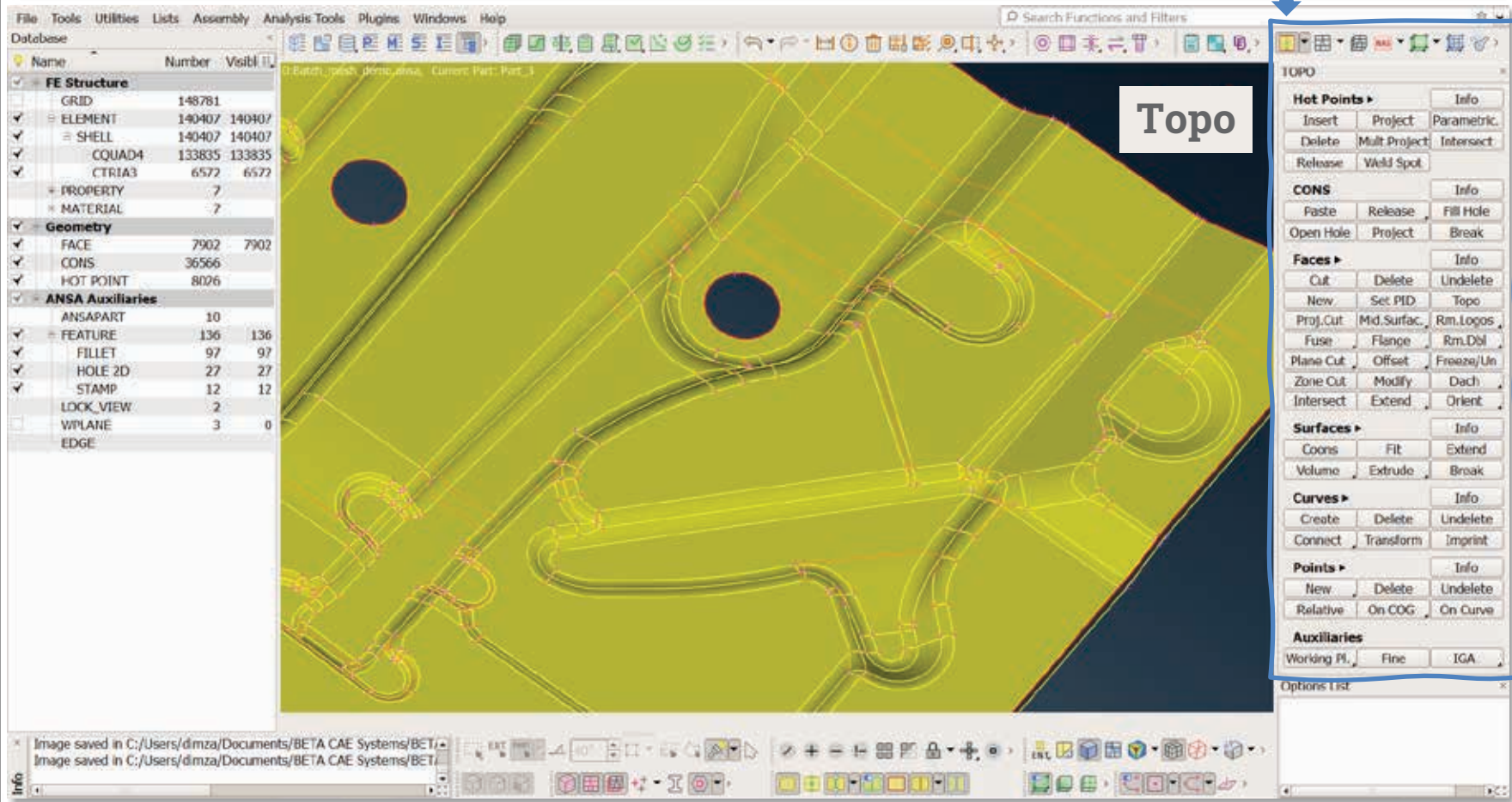
reading ansa_v12.1.6/config/ANSA.defasits
NOTICE: script file [/mnt/raid_disk/titanas/ANSA_2001-xx/ansa_v12.1.6/config/ANSA_TRANSL] not found
NOTICE: script file [/home/dimitris/ANSA_TRANSL] not found
NOTICE: script file [/mnt/raid_disk/titanas/ANSA_2001-xx/ANSA_TRANSL] not found
Generating code...

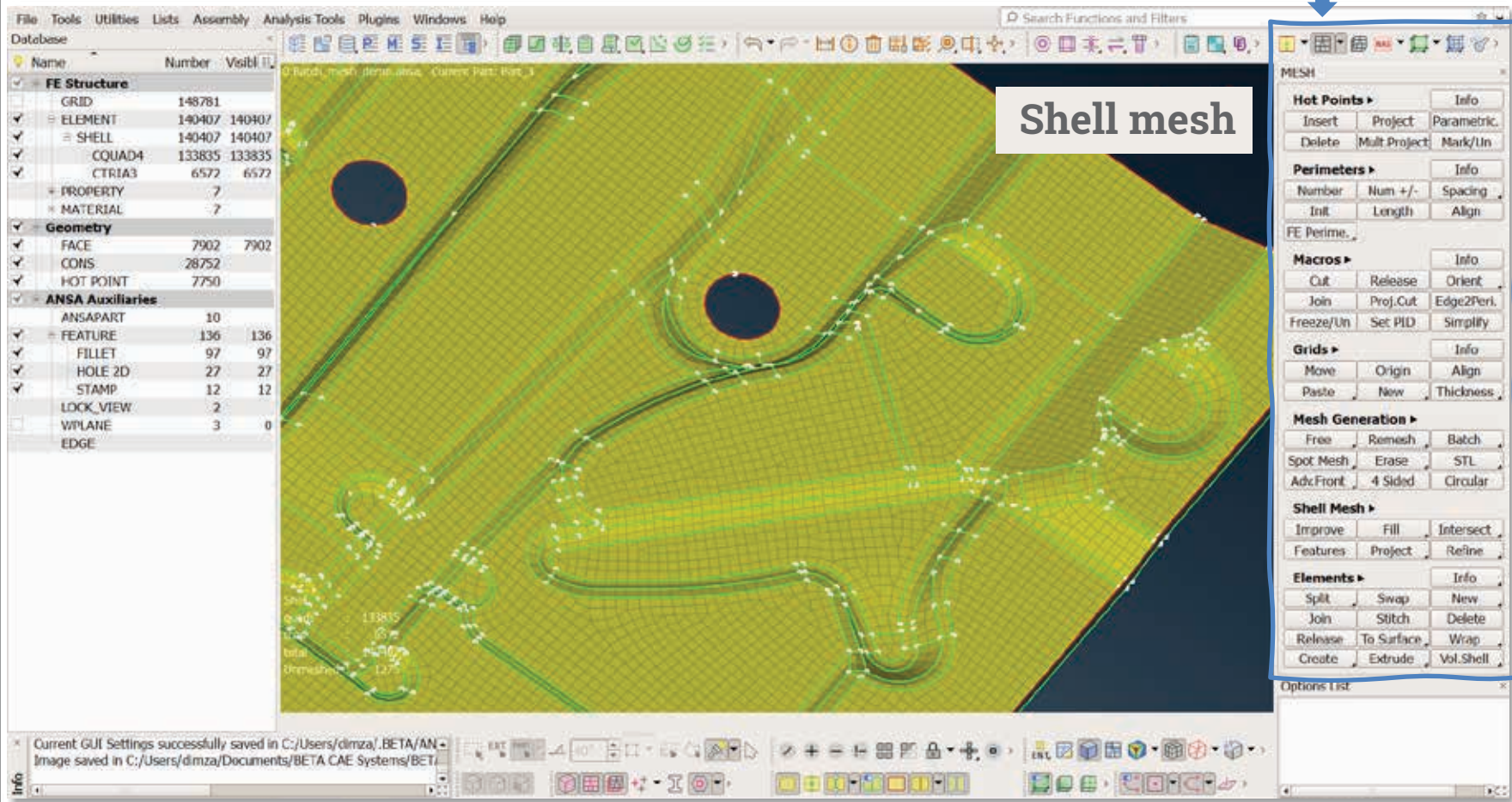
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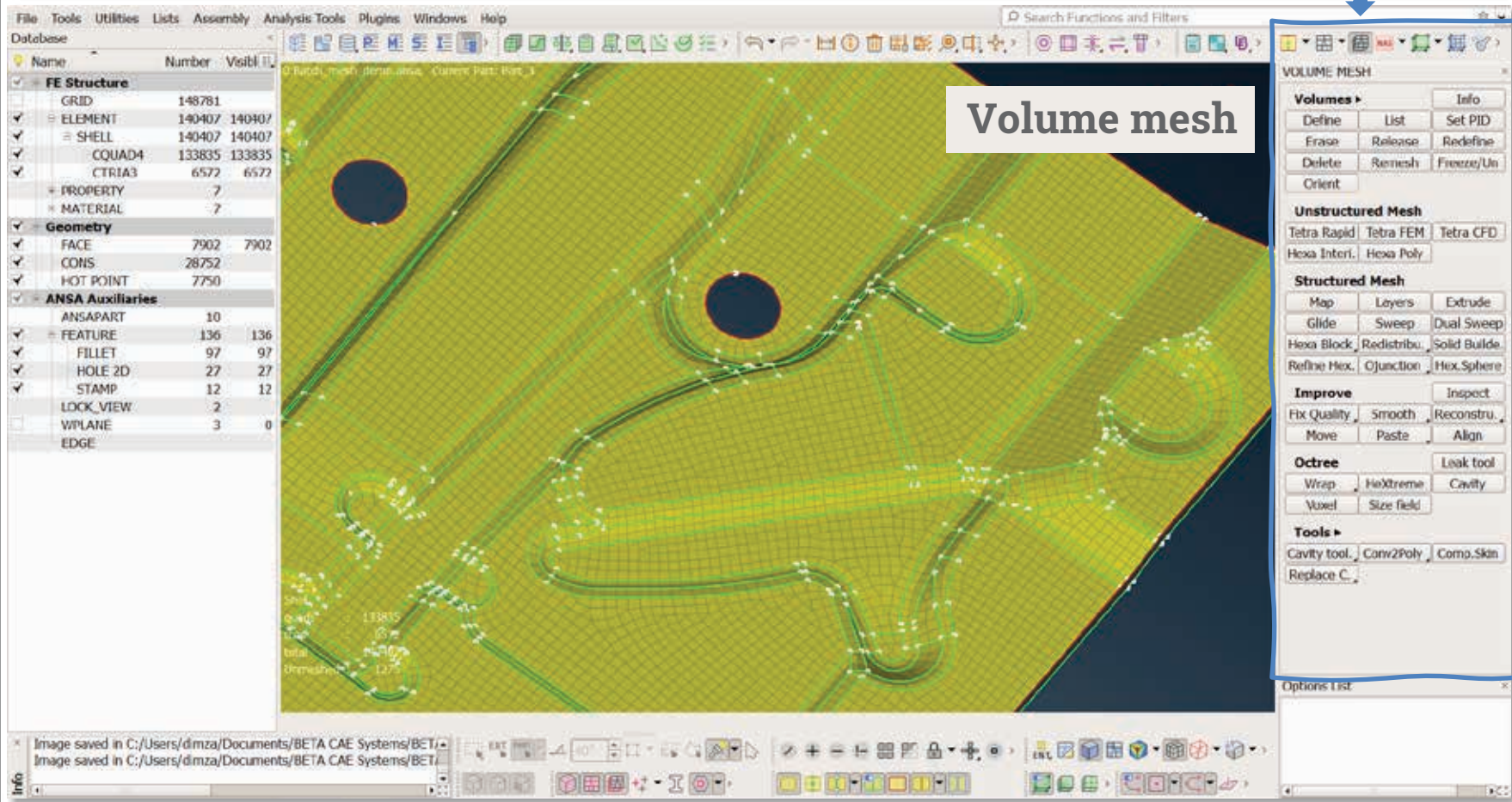
Right sidebar menu items:

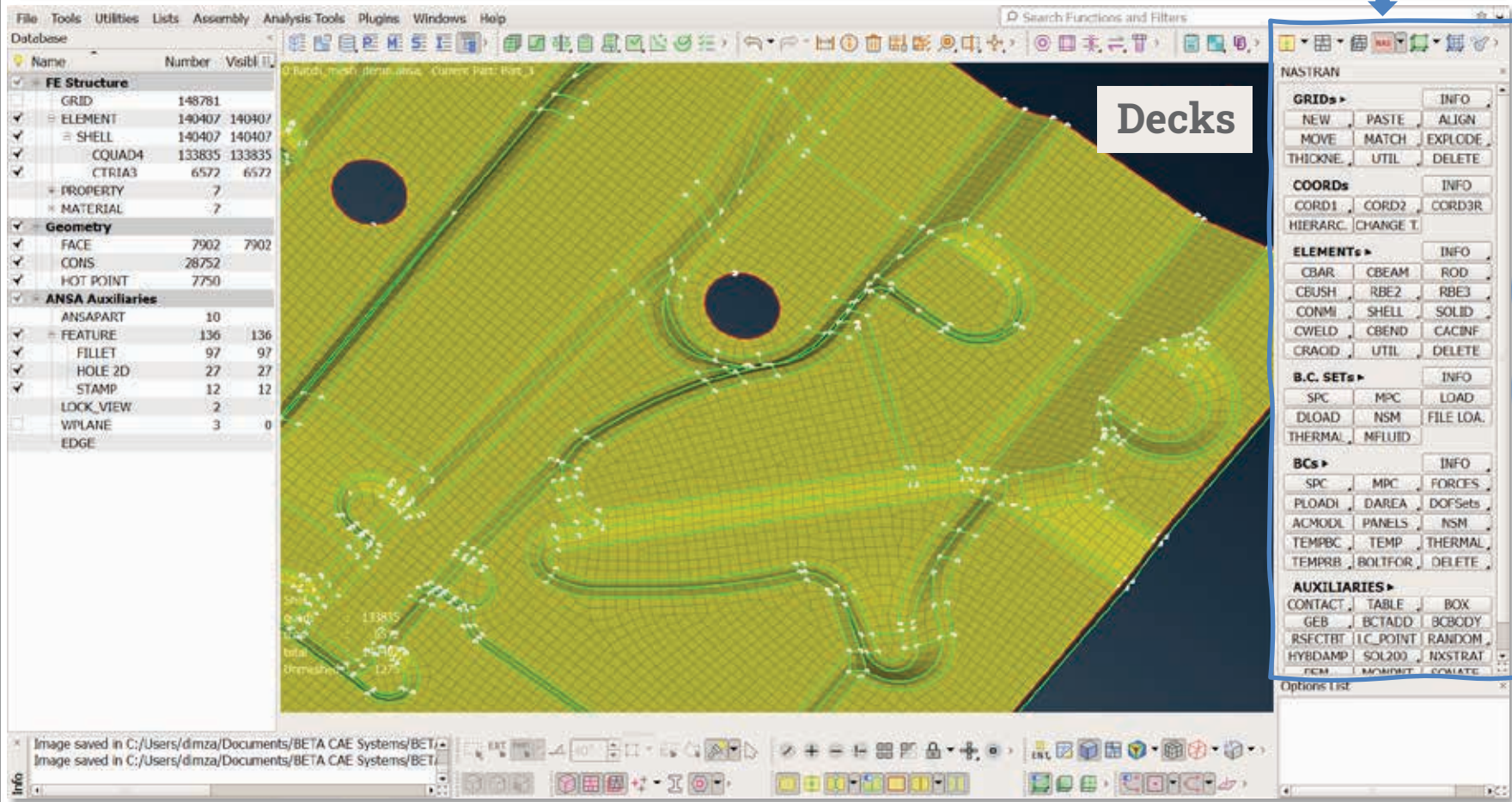
- NOT POINTS INFO
- INSERT PROJECT PARAM
- MULT.PA DELETE
- WELD SPOTS INFO
- DEFINE MAKE UNSUP
- AGRESSIVE ERASE REALIZE
- PERIMETER 2 INFO
- SURFER DISTOR NO-SURF
- MULT.ME SPACING INIT
- ALIGN LENGTH SLIDE
- MACHIN 3 INFO
- CUT BREAK RELEASE
- JOIN ORIENT INVERT
- EDGEFER SET PID FINCUT
- LENGTH FREEZE UNFREEZE
- SEID 1 INFO
- MP FREE ALIGN ORIGIN
- MP SURF MP ROLE PROJECT
- PASTE A.PASTE INSERT
- SHELL MESH 2 PARAM
- FREE BEST MIXED...
- SPOT-ME NO-MESH 2ND OR
- GRADUAL SECOND DISTOR
- MAY SMOOTH BECON
- ADV.FR REDSHAPE A MESH
- CPS FIX QUAL ERASE
- ELEMENT 2 INFO
- SPLIT SWAP JOIN
- NEW DELETE FILL GAP
- TO-SURF WRAP OFFSET
- PENETR VOL-SHEL RELEASE
- VOLUME INFO
- DEFINE DETECT SET PID
- MESHV MAY PARAM
- LAYERS CAVITY ERASE
- EXPORSE VOLUMES DELETE

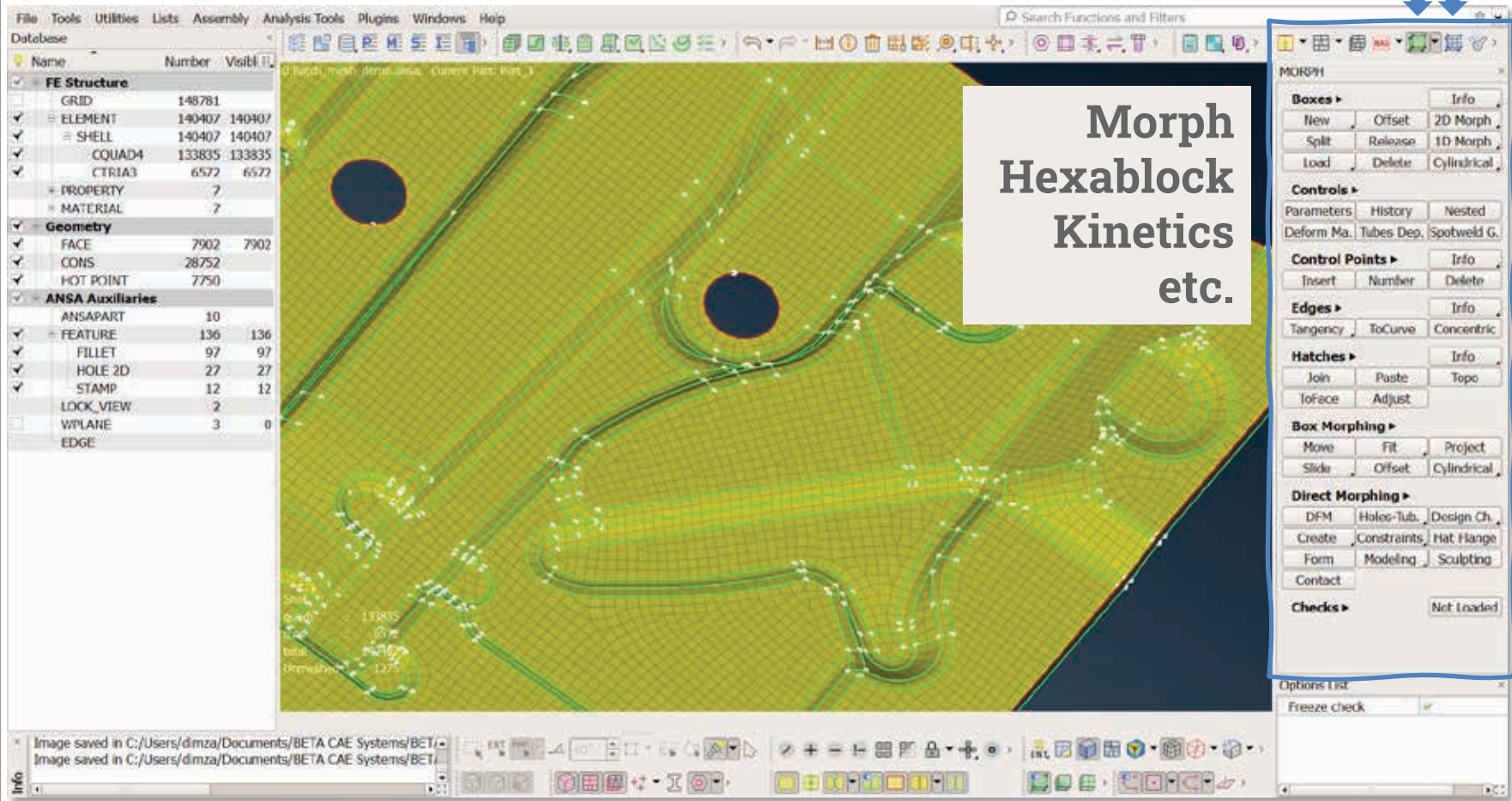


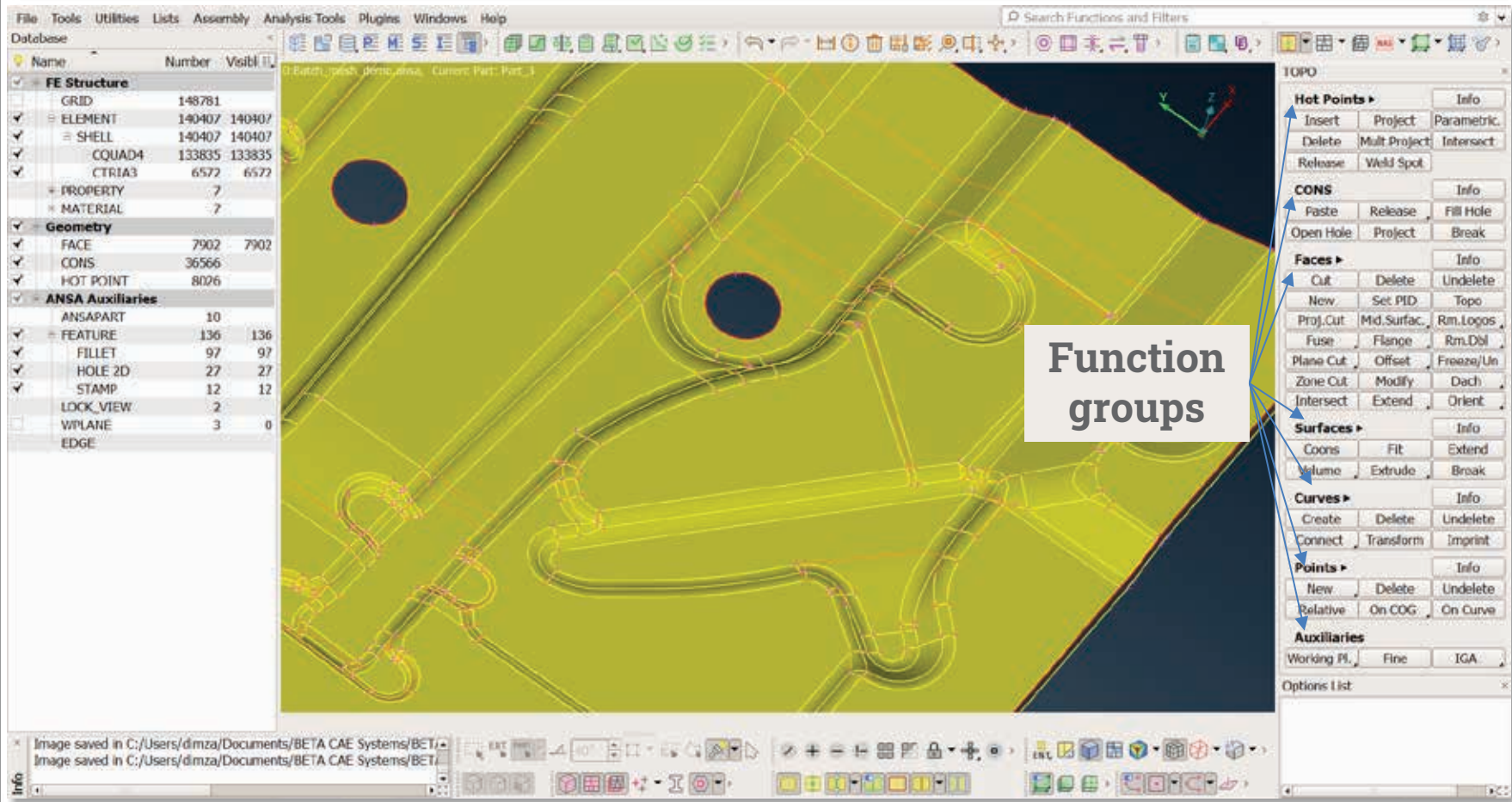


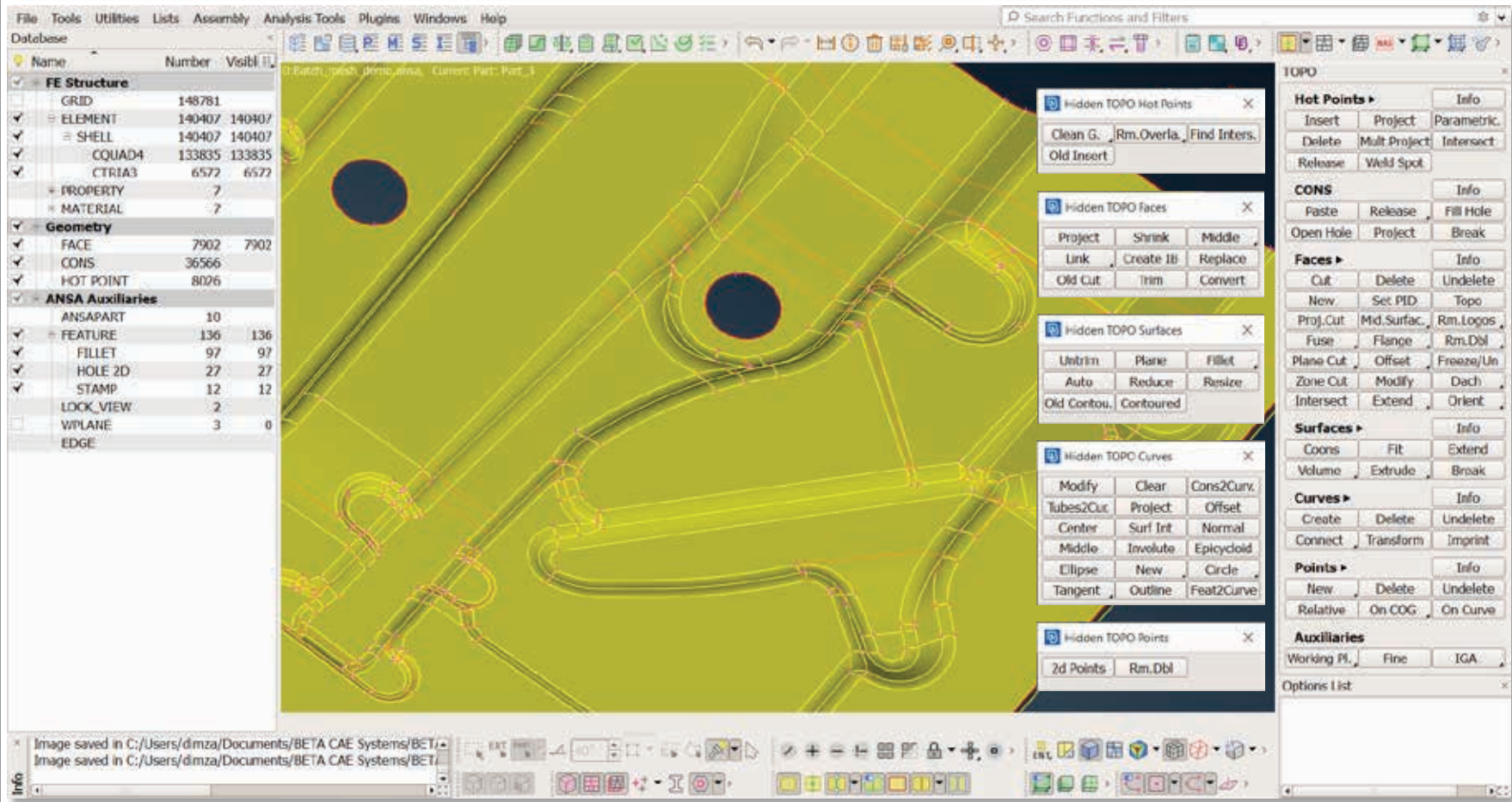


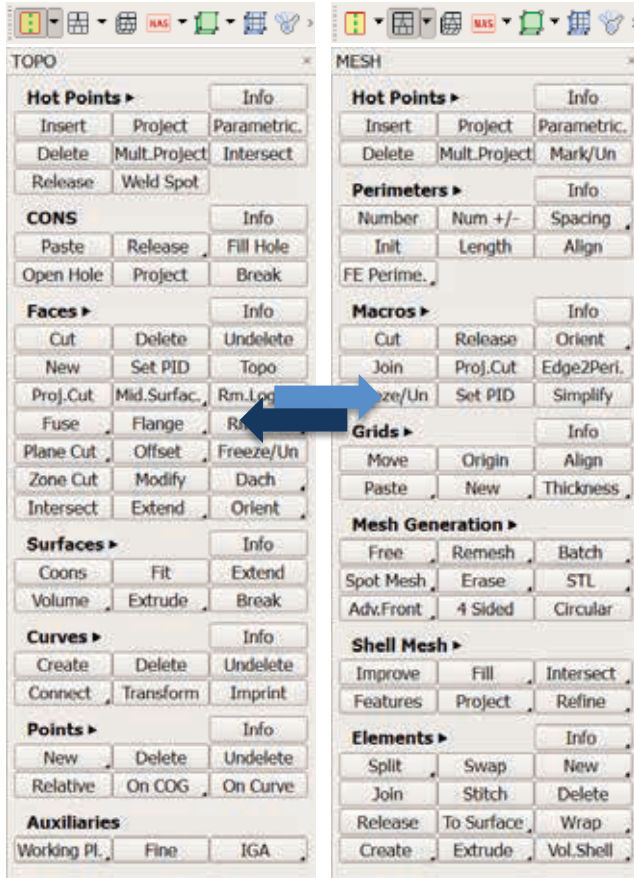








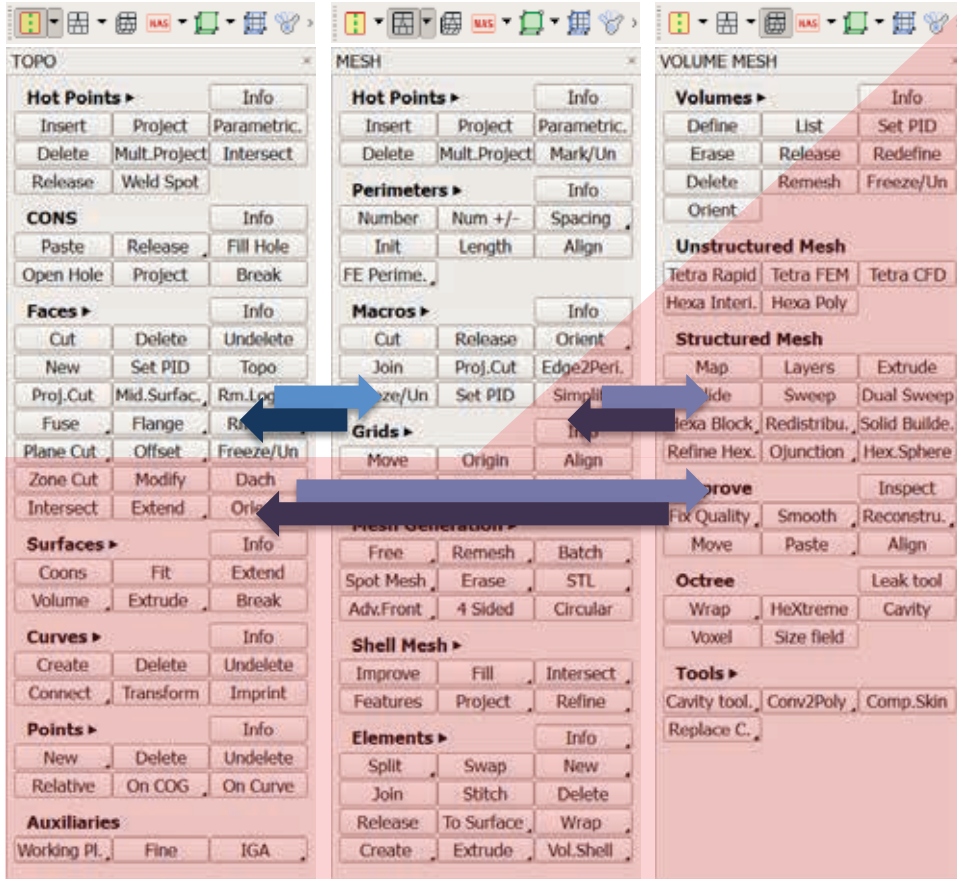




TOPO - MESH

Visible buttons : 122

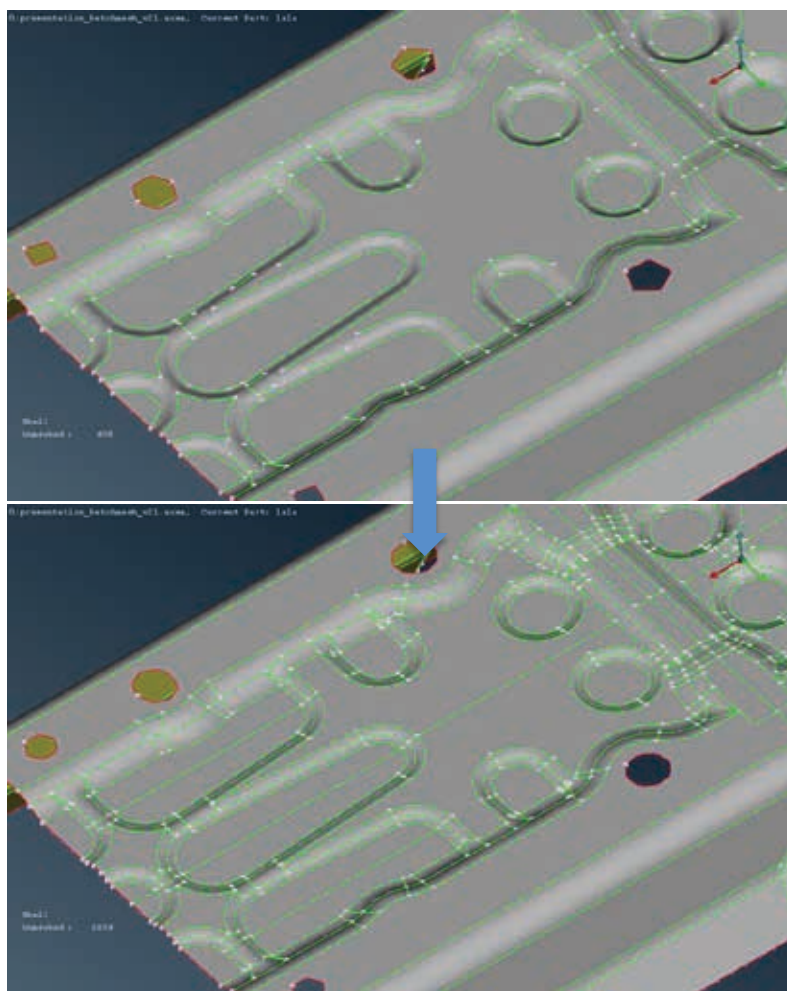
Hidden buttons : 91



TOPO – SHELL & VOLUME MESH

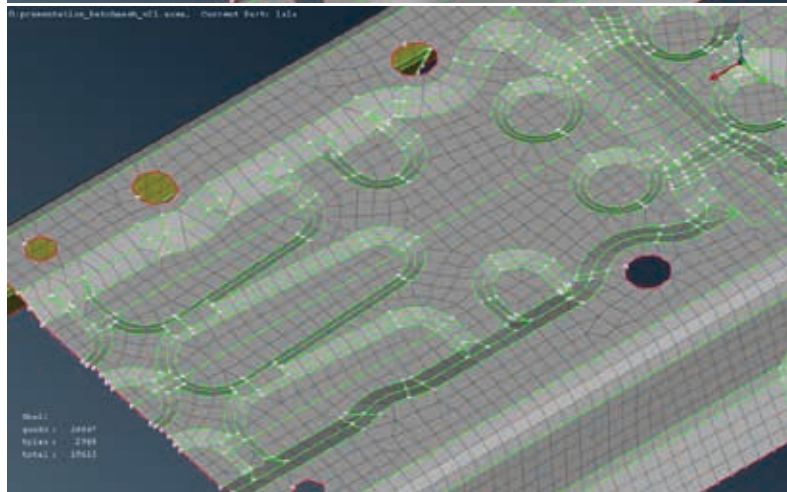
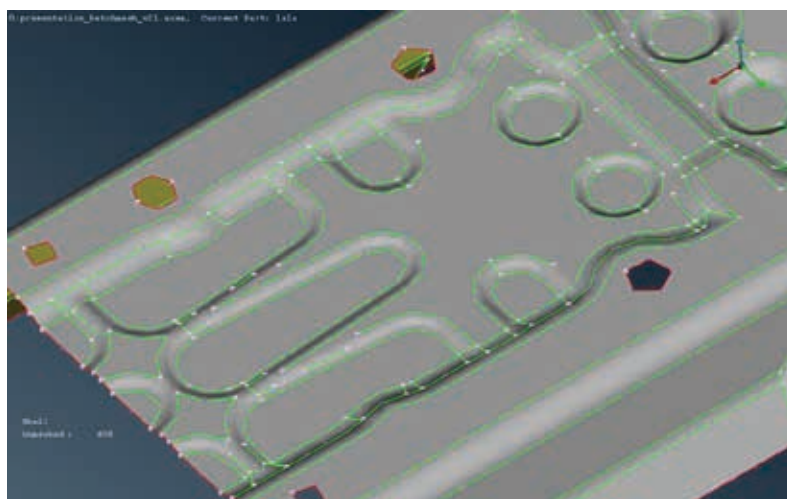
Visible buttons : 164

Hidden buttons : 94



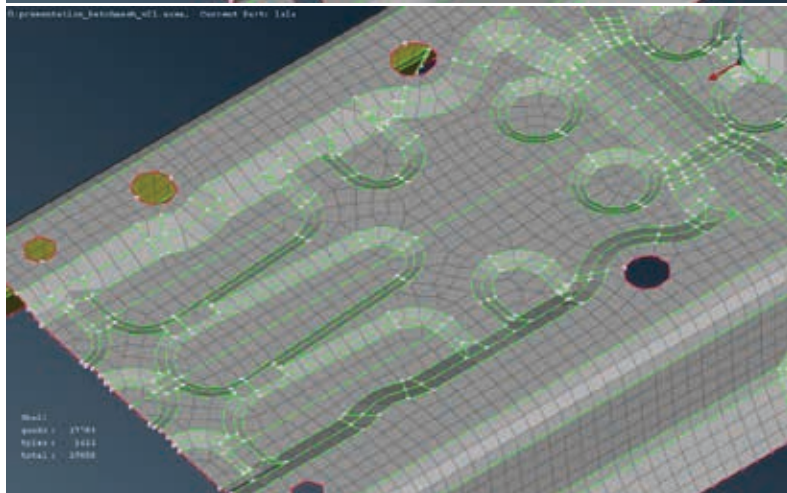
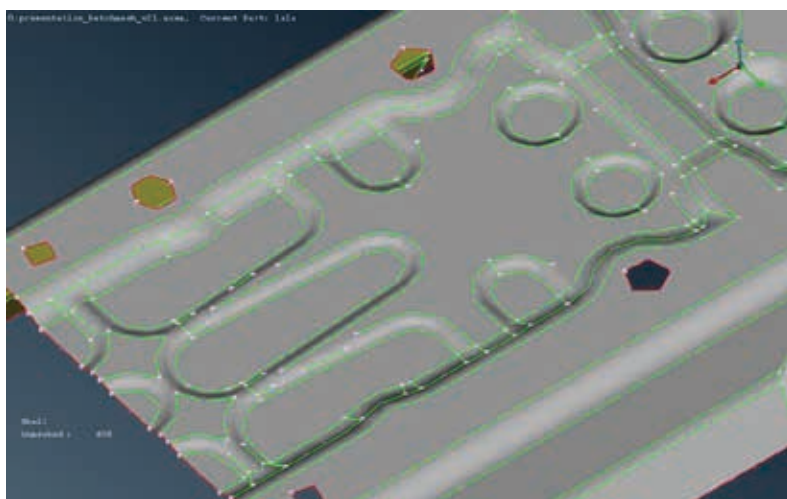
MESH

Hot Points ▶			Info
Insert	Project	Parametric.	
4 Delete	Mult.Project	Mark/Un	
Perimeters ▶			Info
Number	Num +/-	Spacing	
5 Init	6 Length	Align	
FE Perime.			
Macros ▶			1 3 Info
Cut	Release	Orient	
2 Join	Proj.Cut	Edge2Peri.	
Freeze/Un	Set PID	Simplify	
Grids ▶			Info
Move	Origin	Align	
Paste	New	Thickness	
Mesh Generation ▶			
Free	Remesh	Batch	
Spot Mesh	Erase	STL	
Adv.Front	4 Sided	Circular	
Shell Mesh ▶			
Improve	Fill	Intersect	
Features	Project	Refine	
Elements ▶			Info
Split	Swap	New	
Join	Stitch	Delete	
Release	To Surface	Wrap	
Create	Extrude	Vol.Shell	



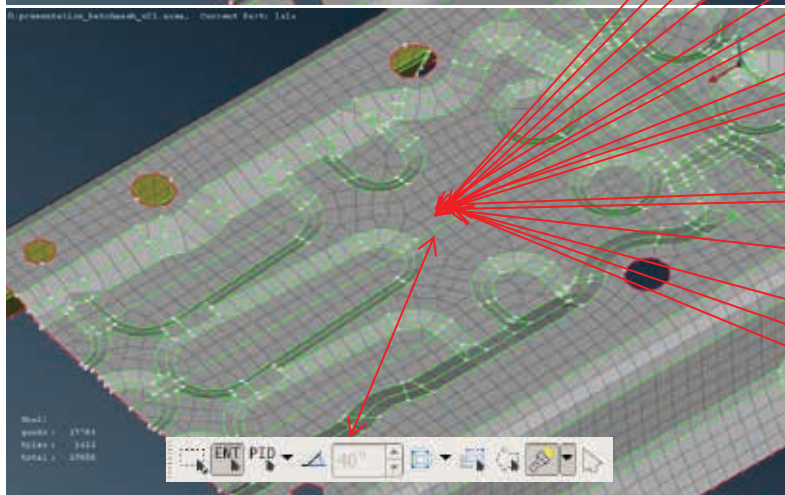
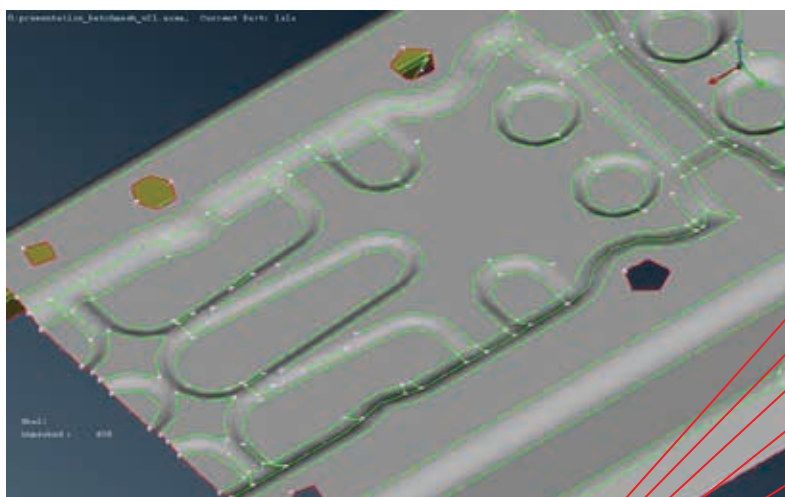
MESH

Hot Points ▶			Info
Insert	Project	Parametric.	
4 Delete	Multi.Project	Mark/Un	
Perimeters ▶			Info
Number	Num +/-	Spacing	
5 Init	6 Length	Align	
FE Perime. .			
Macros ▶			1 3 Info
Cut	Release	Orient	
2 Join	Proj.Cut	Edge2Peri.	
Freeze/Un	Set PID	Simplify	
Grids ▶			Info
Move	Origin	Align	
Paste	New	Thickness	
Mesh Generation ▶			
7 Free	Remesh	Batch	
Spot Mesh	Erase	STL	
Adv.Front	4 Sided	Circular	
Shell Mesh ▶			
Improve	Fill	Intersect	
Features	Project	Refine	
Elements ▶			Info
Split	Swap	New	
Join	Stitch	Delete	
Release	To Surface	Wrap	
Create	Extrude	Vol.Shell	



MESH

Hot Points ▶			Info
Insert	Project	Parametric.	
4 Delete	Multi.Project	Mark/Un	
Perimeters ▶			Info
Number	Num +/-	Spacing	
5 Init	6 Length	Align	
FE Perime.			
Macros ▶			1 3 Info
Cut	Release	Orient	
2 Join	Proj.Cut	Edge2Peri.	
Freeze/Un	Set PID	Simplify	
Grids ▶			Info
Move	Origin	Align	
Paste	New	Thickness	
Mesh Generation ▶			
7 Free	Remesh	Batch	
Spot Mesh	Erase	STL	
Adv.Front	4 Sided	Circular	
Shell Mesh ▶			
8 Improve	Fill	Intersect	
Features	Project	Refine	
Elements ▶			Info
Split	Swap	New	
Join	Stitch	Delete	
Release	To Surface	Wrap	
Create	Extrude	Vol.Shell	



MESH

Hot Points ▶ Info

Insert Project Parametric

Delete Mult.Project Mark/Un

Perimeters ▶ Info

Number Num +/- Spacing

Init Length Align

FE Perime.

Macros ▶ Info

Cut Release Orient

Join Proj.Cut Edge2Peri.

Freeze/Un Set PID Simplify

Grids ▶ Info

Move Origin Align

Paste New Thickness

Mesh Generation ▶

Free Remesh Batch

Spot Mesh Erase STL

Adv Front 4 Sided Circular

Shell Mesh ▶

Improve Fill Intersect

Features Project Refine

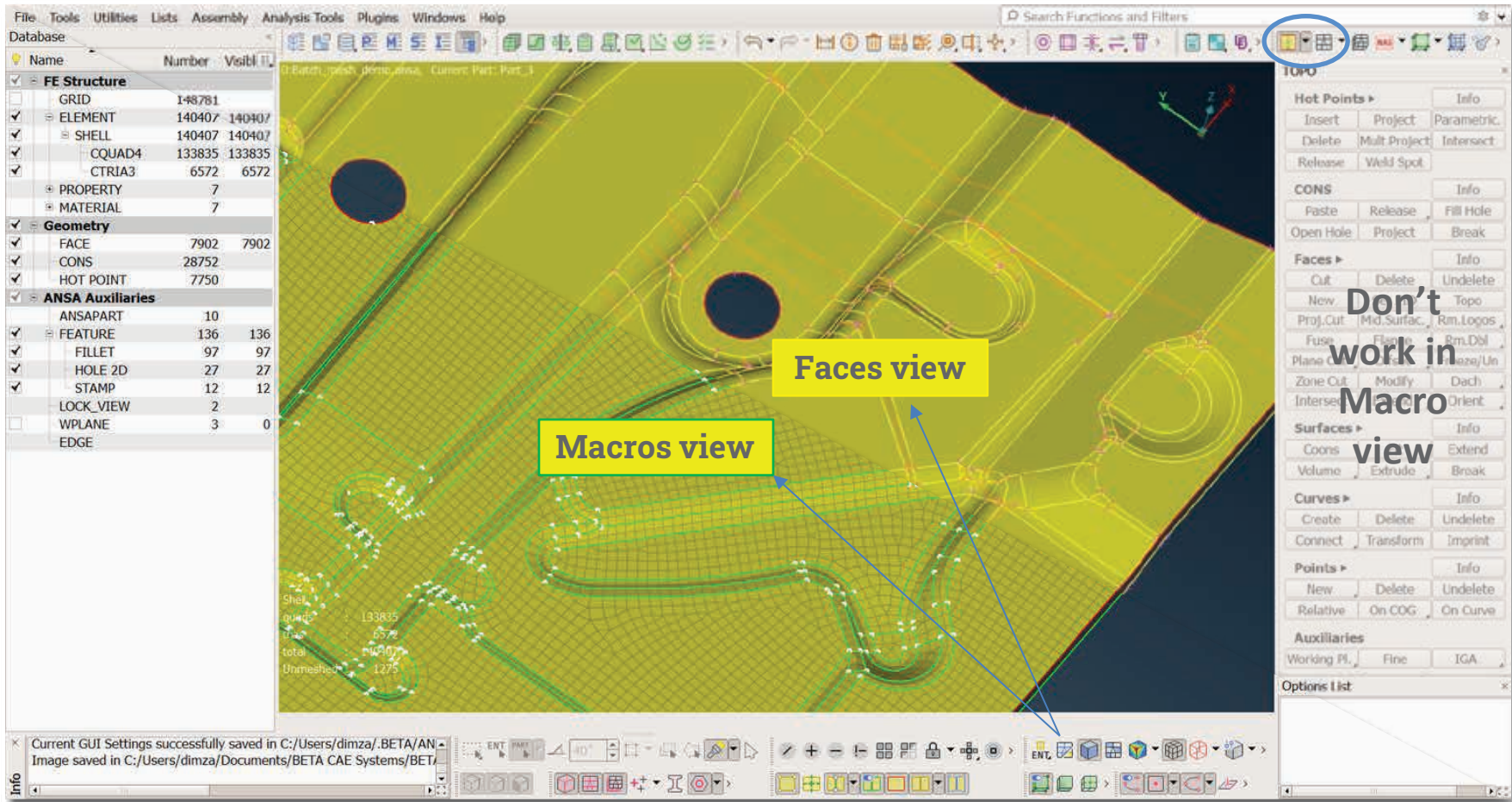
Elements ▶ Info

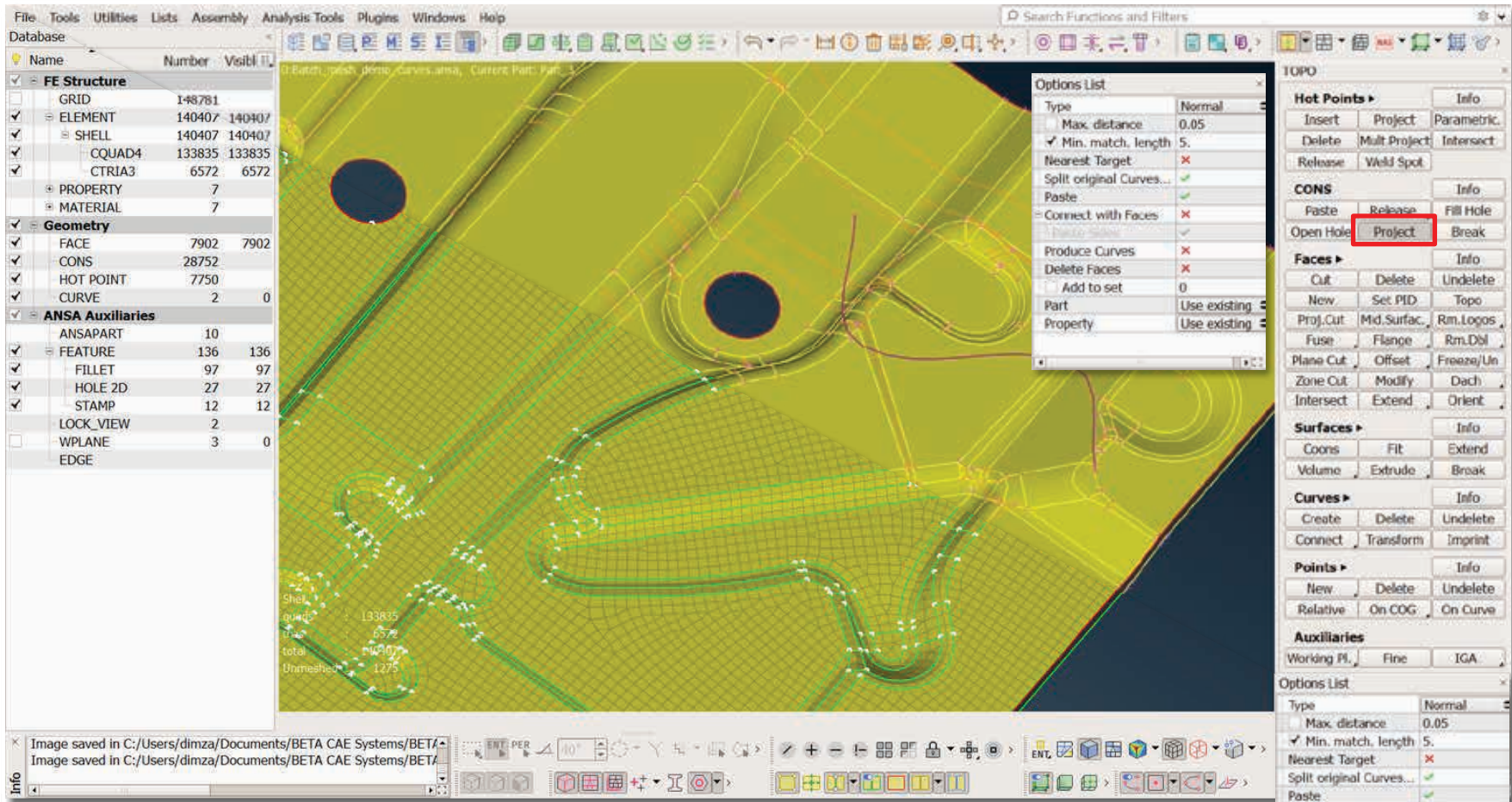
Split Swap New

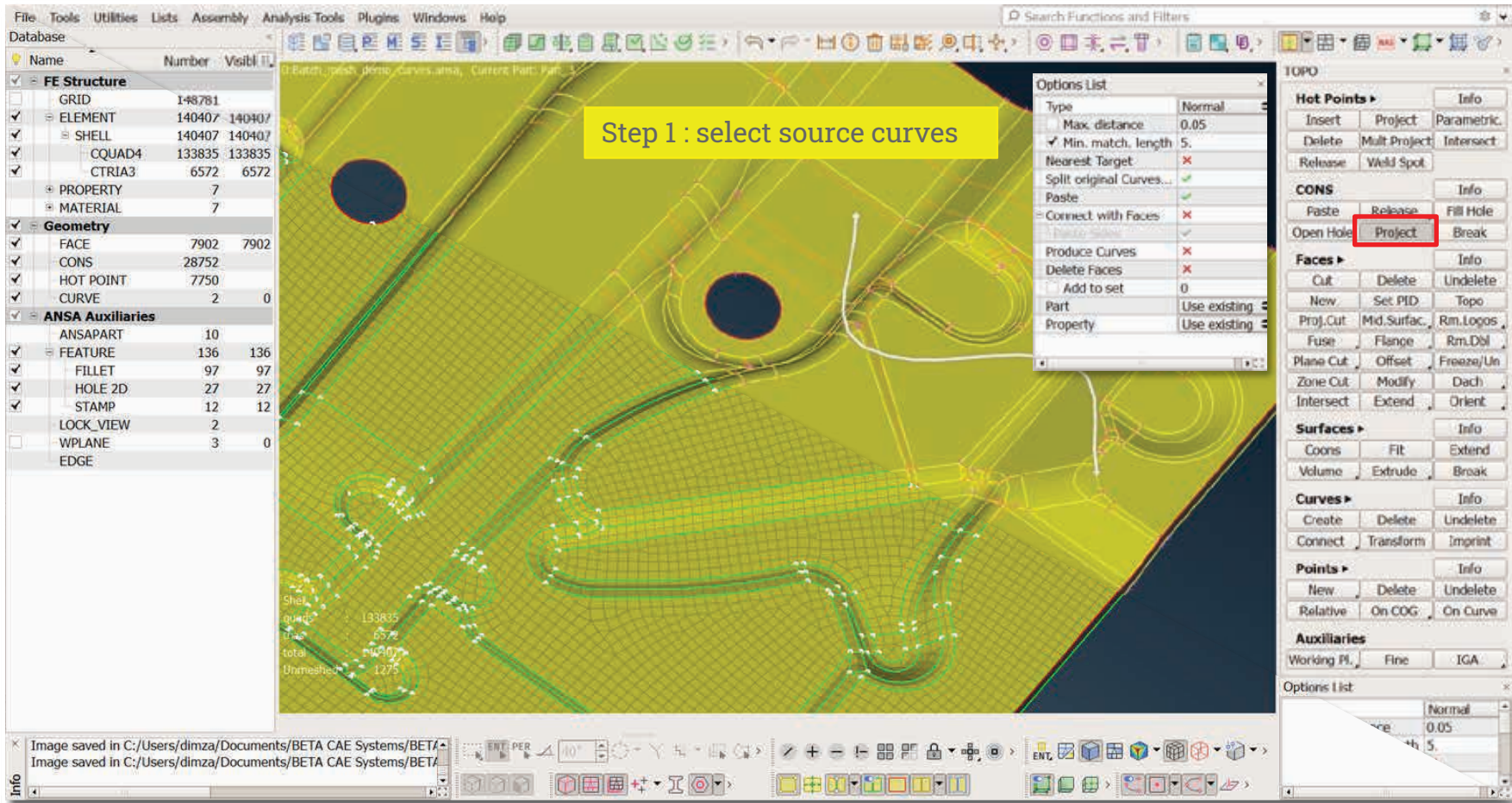
Join Stitch Delete

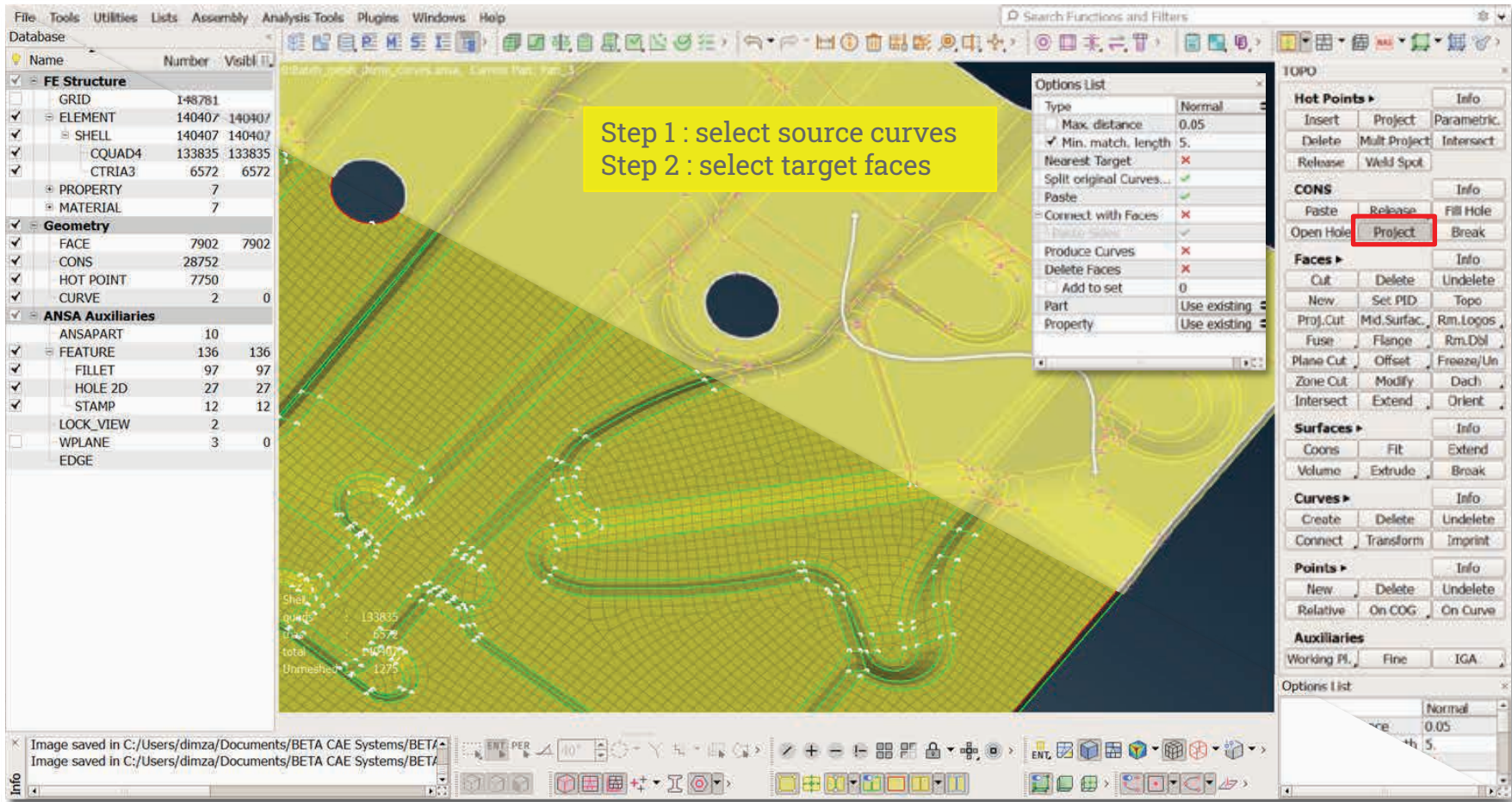
Release To Surface Wrap

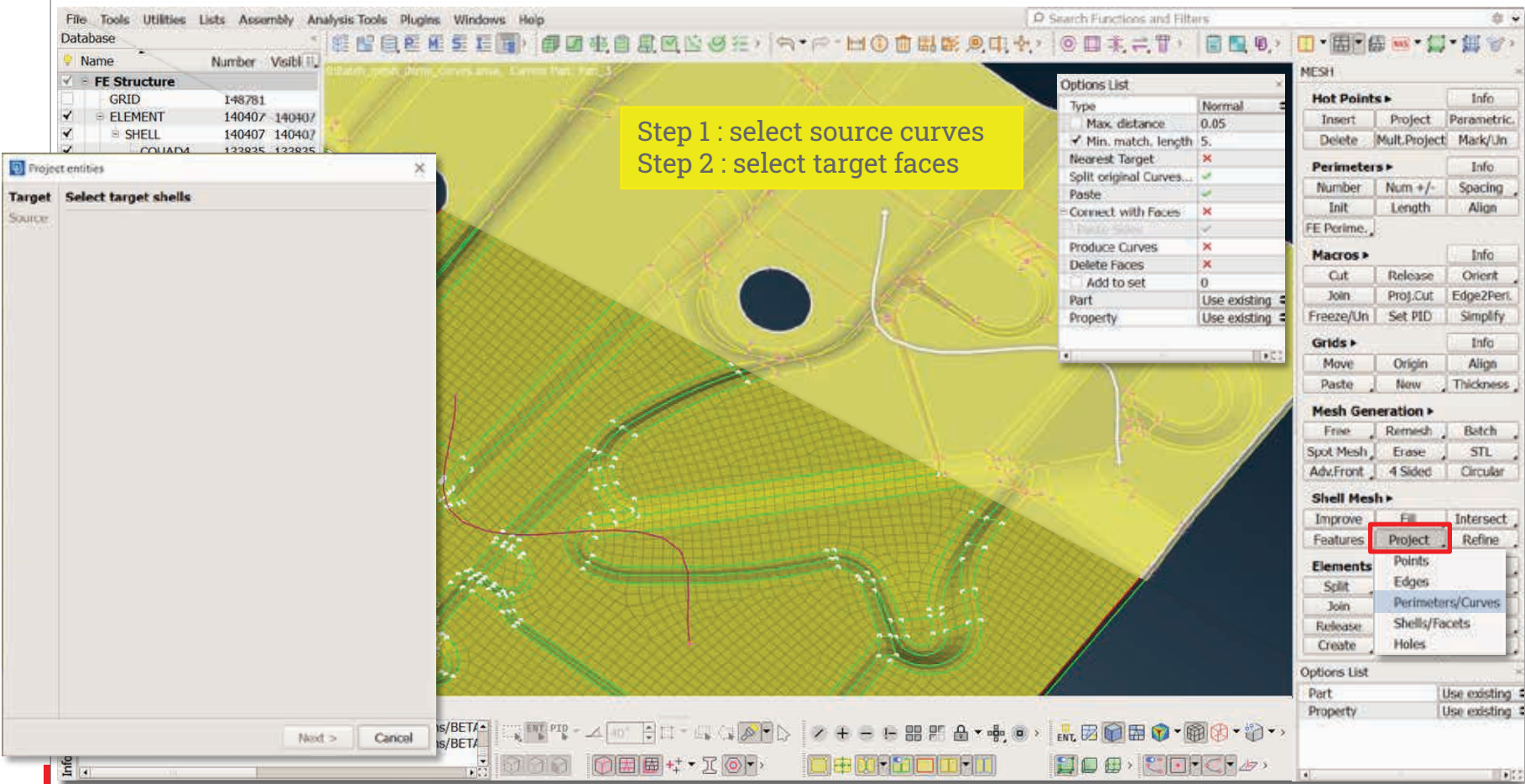
Create Extrude Vol.Shell

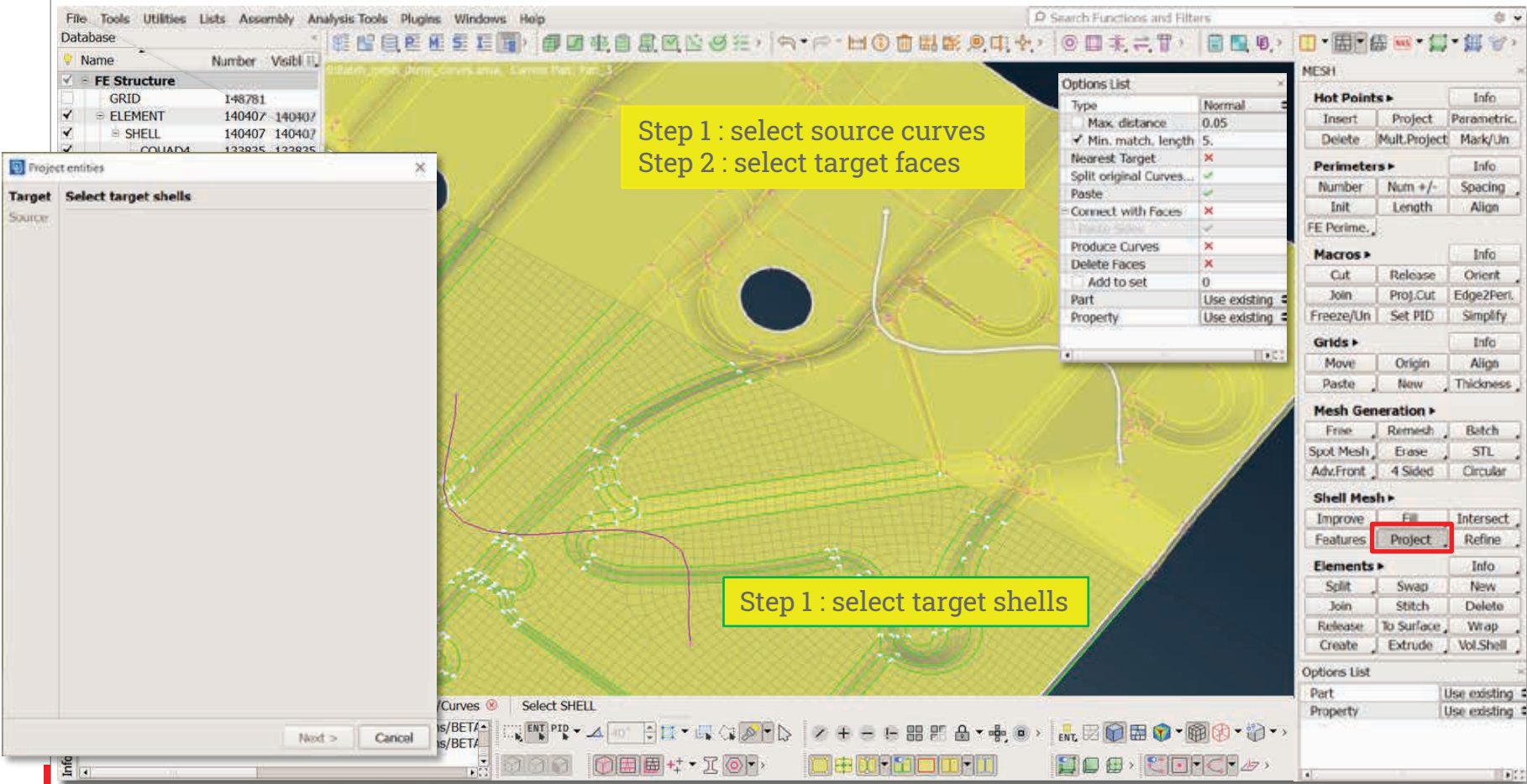


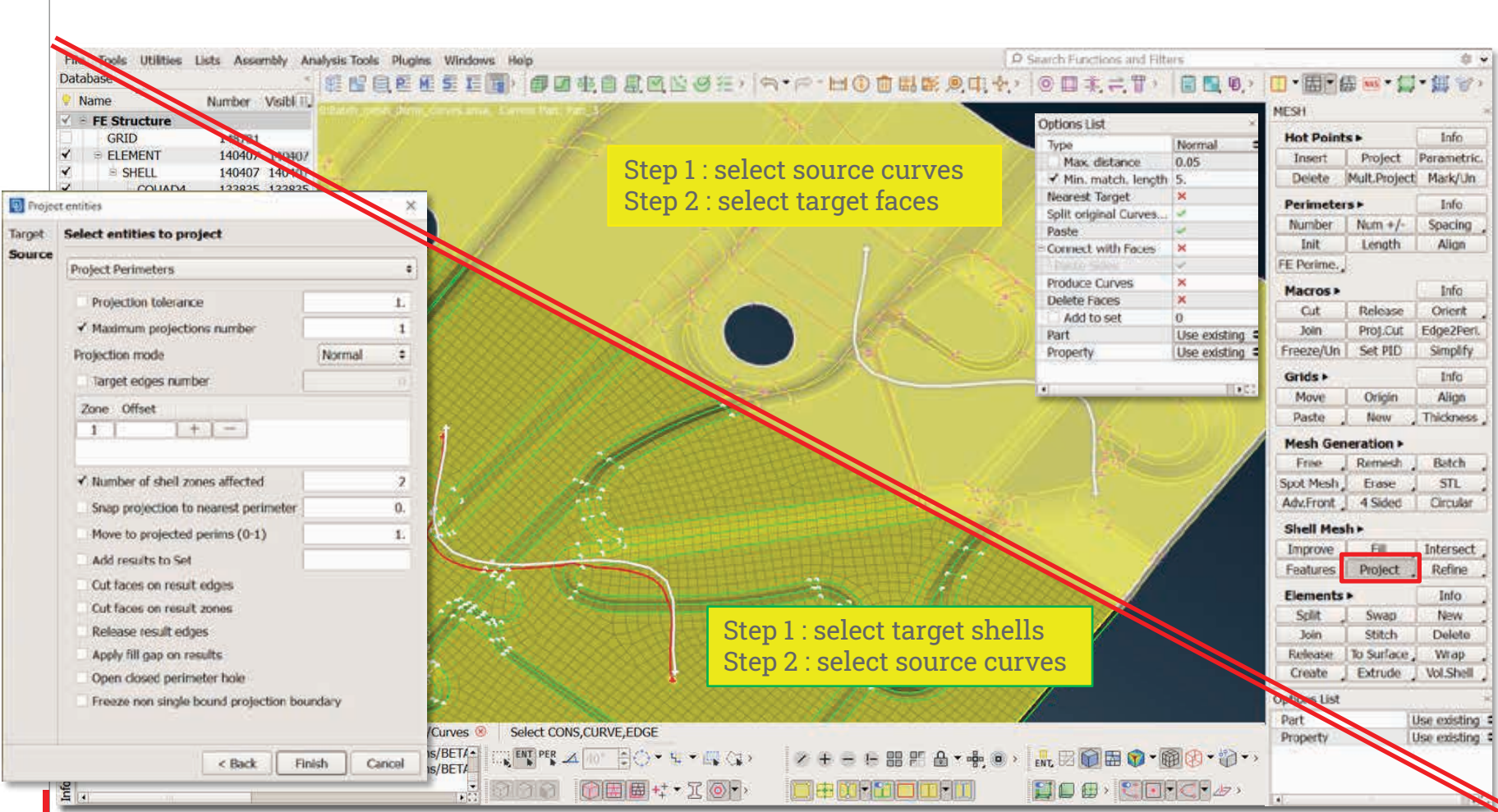












Step 1 : select source curves
Step 2 : select target faces

Step 1 : select target shells
Step 2 : select source curves

Project entities

Target: **Select entities to project**

Source: Project Perimeters

Projection tolerance: 1.

Maximum projections number: 1

Projection mode: Normal

Target edges number: 0

Zone: Offset: 1

Number of shell zones affected: 2

Snap projection to nearest perimeter: 0.

Move to projected perims (0-1): 1.

Add results to Set

Cut faces on result edges

Cut faces on result zones

Release result edges

Apply fill gap on results

Open closed perimeter hole

Freeze non single bound projection boundary

< Back Finish Cancel

Options List

Type	Normal
Max. distance	0.05
Min. match. length	5.
Nearest Target	X
Split original Curves...	✓
Paste	✓
Connect with Faces	X
Produce Curves	X
Delete Faces	X
Add to set	0
Part	Use existing
Property	Use existing

MESH

Hot Points ▶ Info

Insert Project Parametric

Delete Mult.Project Mark/Un

Perimeters ▶ Info

Number	Num +/-	Spacing
Init	Length	Align

FE Perime...

Macros ▶ Info

Cut Release Orient

Join Proj.Cut Edge2Perf.

Freeze/Un Set PID Simplify

Grids ▶ Info

Move Origin Align

Paste New Thickness

Mesh Generation ▶

Frise Remesh Batch

Spot Mesh Erase STL

Adv.Front 4 Sided Circular

Shell Mesh ▶

Improve Fill Intersect

Features **Project** Refine

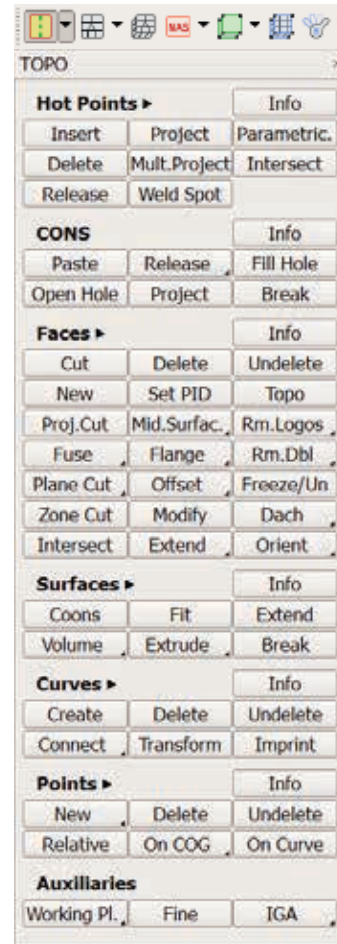
Elements ▶ Info

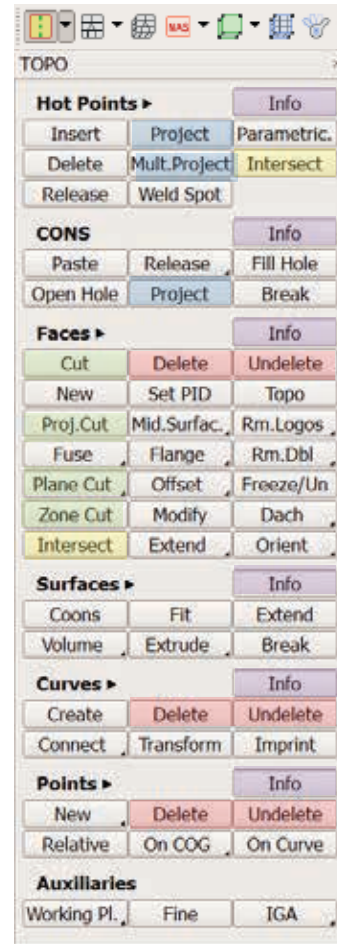
Split	Swap	New
Join	Stitch	Delete
Release	To Surface	Wrap
Create	Extrude	Vol.Shell

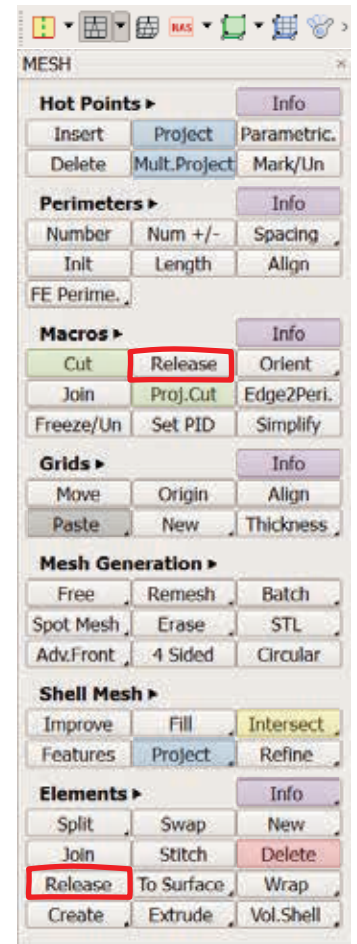
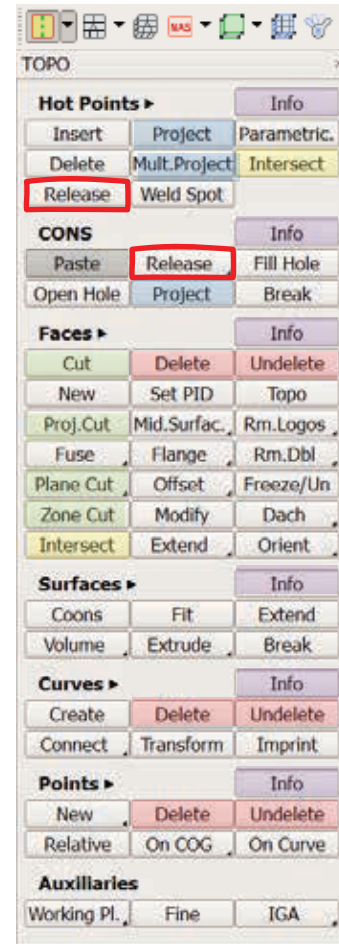
Options List

Part Use existing

Property Use existing









Classic ANSA

Lots of buttons to pick from

Functionality spreads across many modules

Not all function needed for all workflows

Which functions to press and with what order?

Lots of mouse traveling

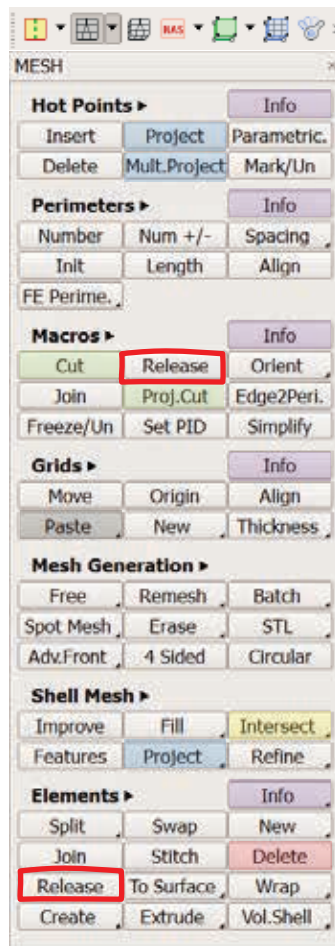
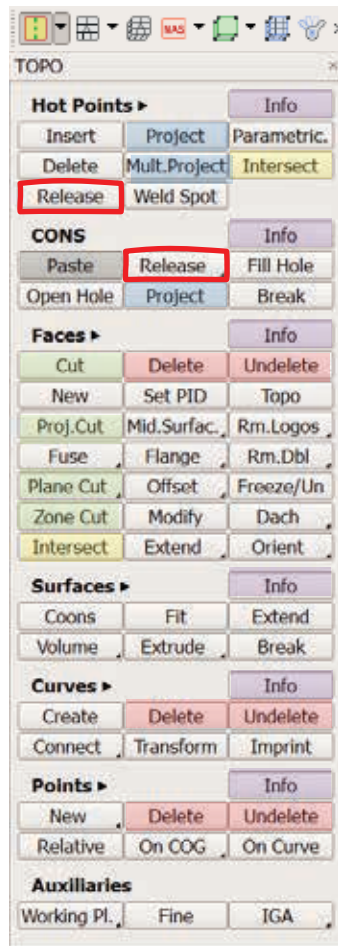
Lack of uniformity

Badly placed options

consolidate

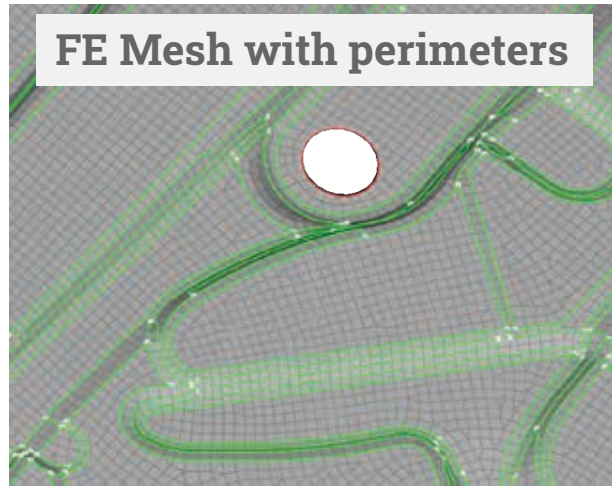
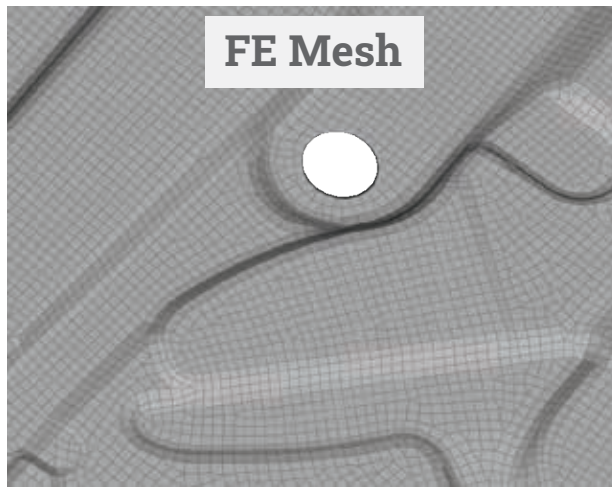
verb

combine (a number of things) into a single more effective or coherent whole



Functions consolidation

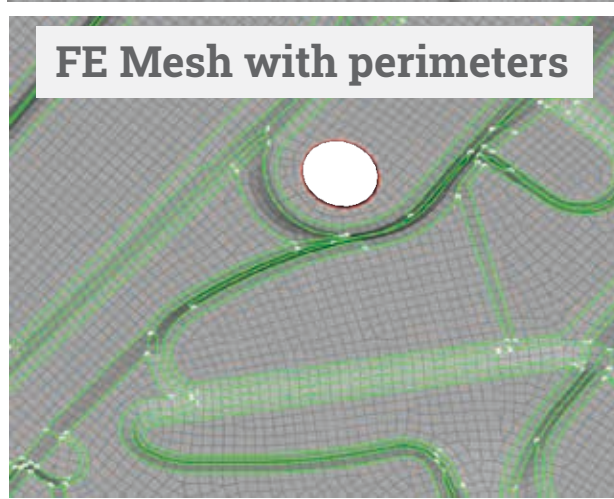
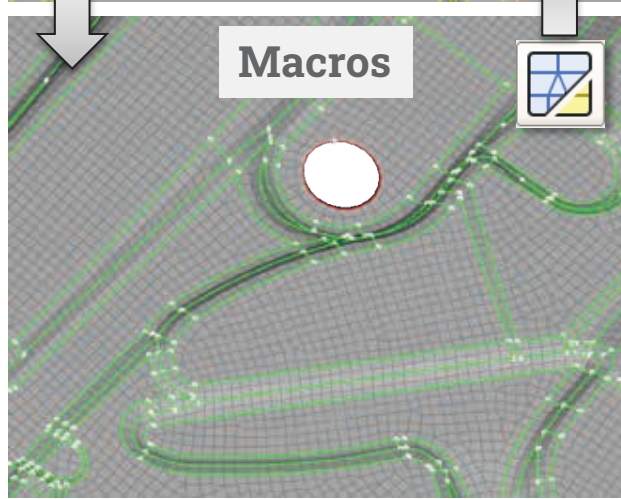
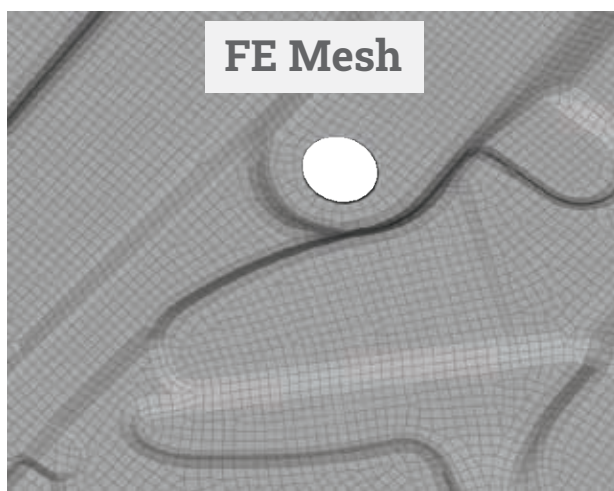
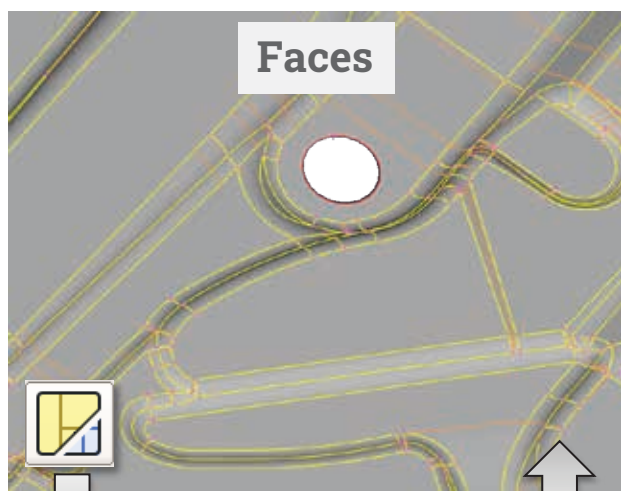
Rules:



Functions consolidation

Rules:

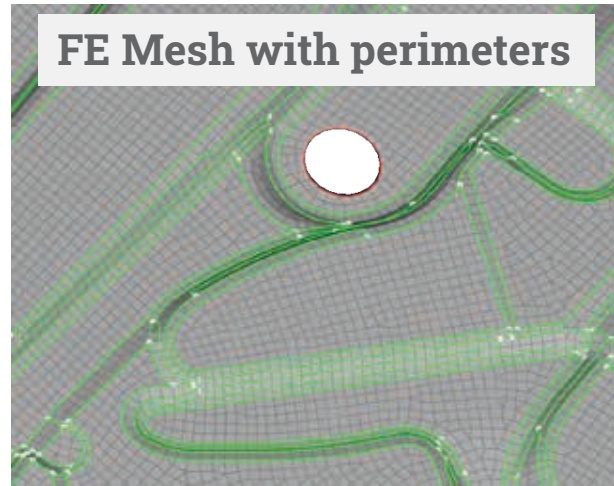
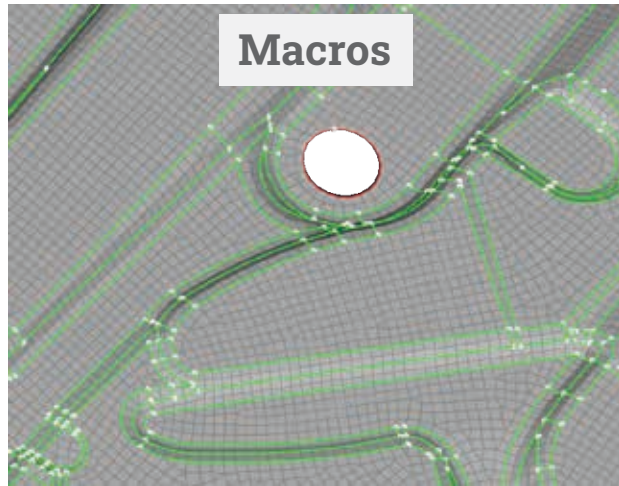
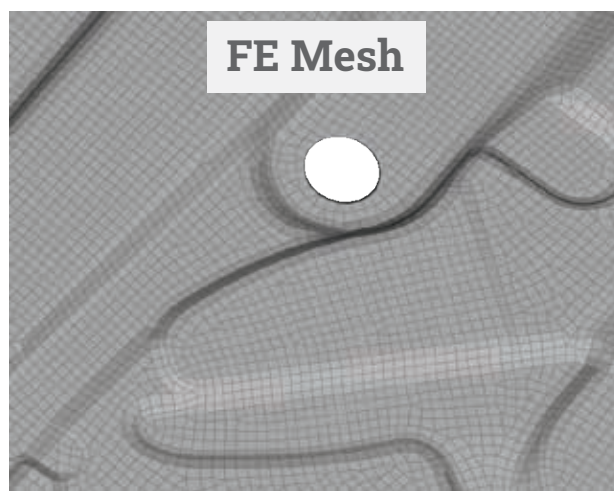
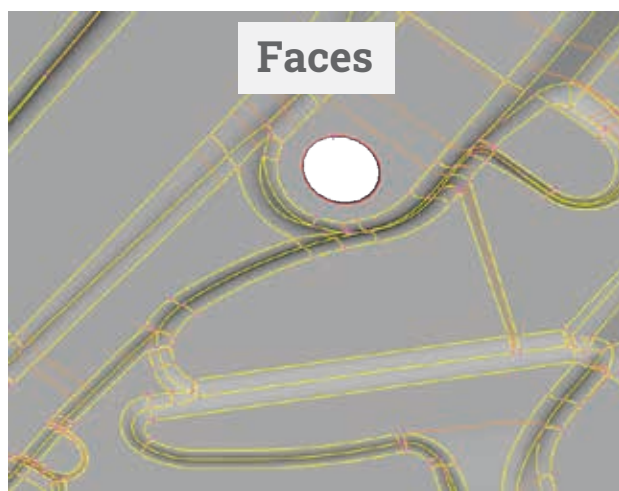
- **Work the same way for Faces or FE mesh**



Functions consolidation

Rules:

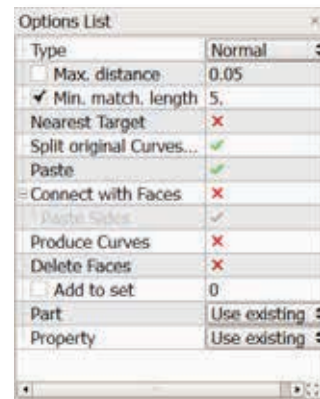
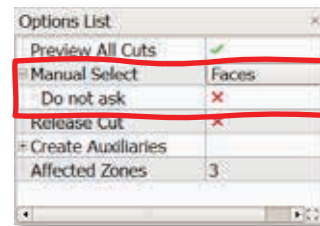
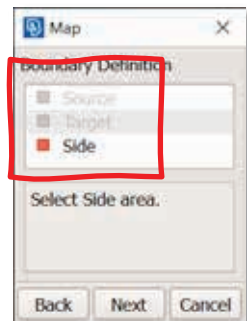
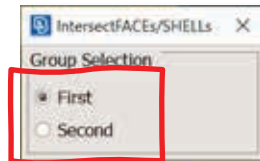
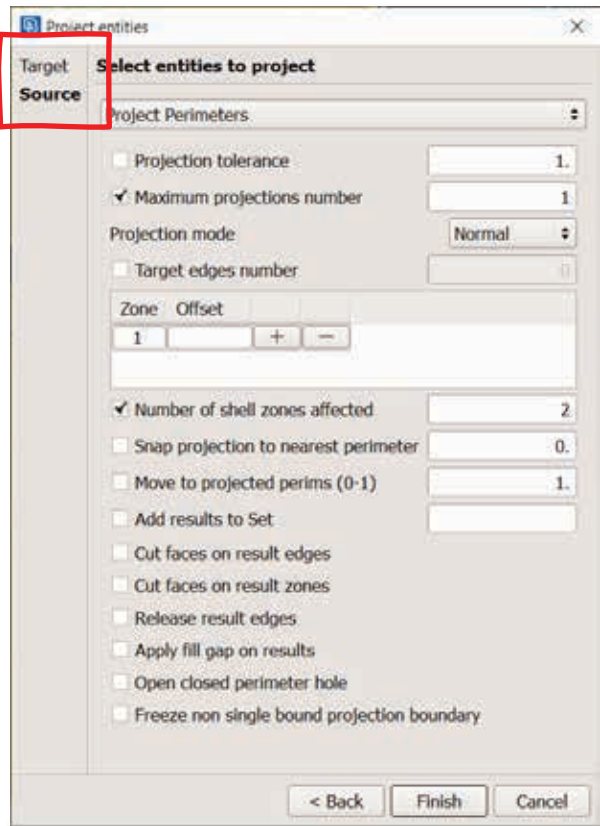
- Work the same way for Faces or FE mesh
- **Work both in Faces or Macro view**



Functions consolidation

Rules:

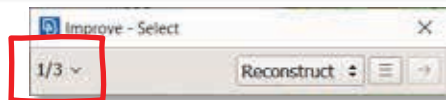
- Work the same way for Faces or FE mesh
- Work both in Faces or Macro view
- **Produce either Faces or FE mesh**

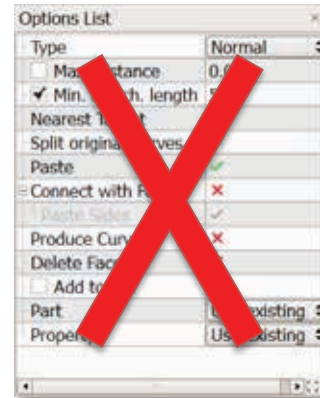
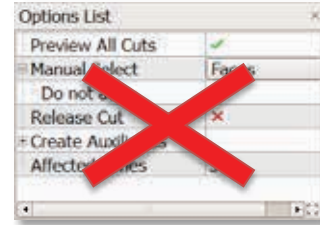
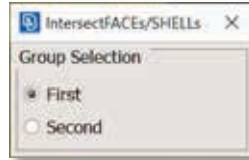
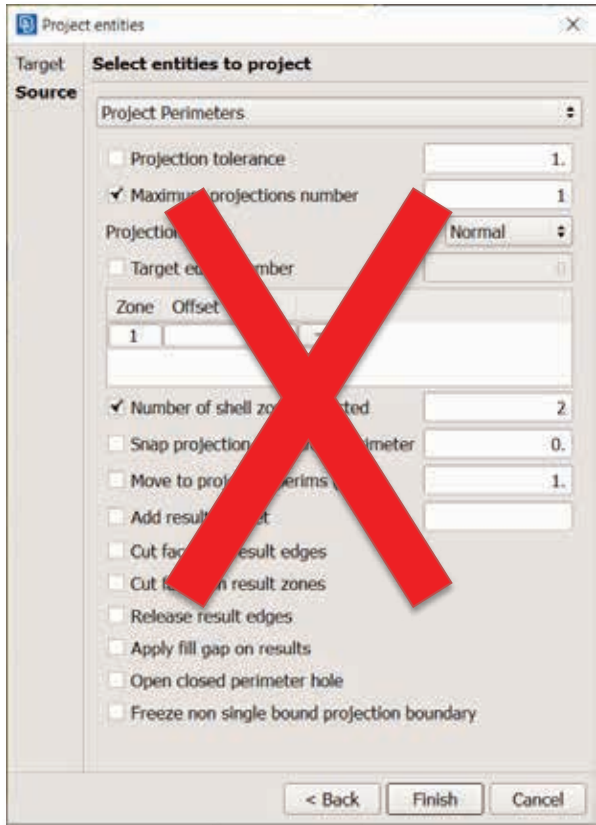


Functions consolidation

Rules:

- Work the same way for Faces or FE mesh
- Work both in Faces or Macro view
- Produce either Faces or FE mesh
- **Uniform Selection methodology**





Functions consolidation

Rules:

- Work the same way for Faces or FE mesh
- Work both in Faces or Macro view
- Produce either Faces or FE mesh
- Uniform Selection methodology
- **Same Look & Feel**

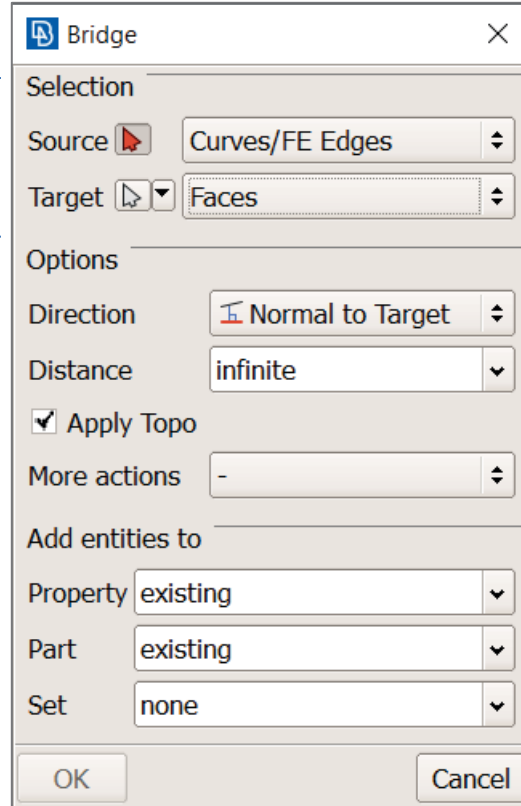


Functions consolidation

Rules:

- Work the same way for Faces or FE mesh
- Work both in Faces or Macro view
- Produce either Faces or FE mesh
- Uniform Selection methodology
- Same Look & Feel

Selection

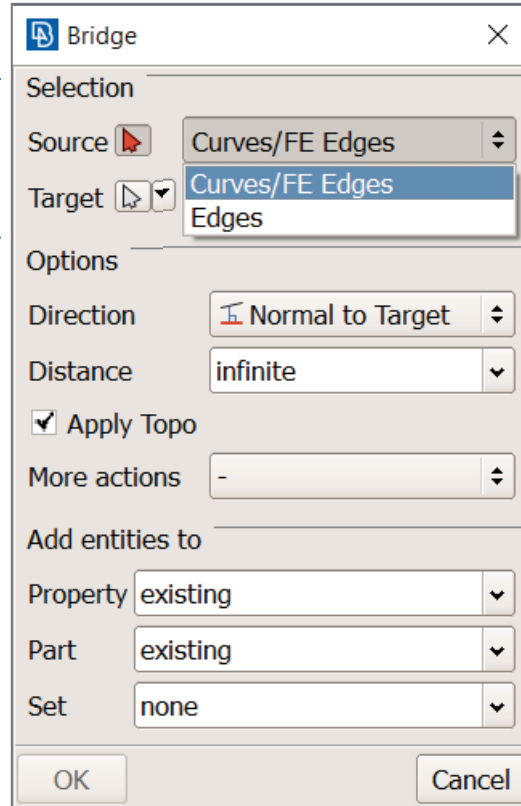


Functions consolidation

Rules:

- Work the same way for Faces or FE mesh
- Work both in Faces or Macro view
- Produce either Faces or FE mesh
- Uniform Selection methodology
- Same Look & Feel

Selection



Functions consolidation

Rules:

- Work the same way for Faces or FE mesh
- Work both in Faces or Macro view
- Produce either Faces or FE mesh
- Uniform Selection methodology
- Same Look & Feel